Editorial Index to Volume 219

January to December 1991

A

ABB Drives — Company profile. Dec 678

Acronyms in steelmaking

Acronyms and Abbreviations used in the Process Technology of Iron and Steel by P H Scholes. Jan 45

Analysis

Nitrogen by optical emission by Edward M Terrell *et al*. Oct 564

Ceramic components increase accuracy. Oct 566

New approach to optical emission spectroscopy; Probing for oxygen. Oct 567

Small scale spectrometer offering 24 element analysis by Jochen Brauner *et al*. Oct 568

Annual Review of European steelmaking. Sept 498

C

Coated steel

Vacuum coating of steel strip. Sept 482

Pilot line for electroplating at Thyssen Stahl AG by K P Imlau *et al*. Sept 484

New hot dipped galvanizing line at Sollac Florange. Sept 488

Galvanneal and organic composite coating by Ryoichi Nomi *et al*. Sept 490

Hot dipping on the BS Zodiac line. Sept 492

The body in question — Nissan's Durasteel. Sept 495

Galvanised products expand. Sept 497

Computers in steel

Quality casting with computer process technology by Sepp Kohl *et al*. Mar 120

SPC tools for improved quality and for preventing waste by Ian M Raymond. Mar 122

Controlling the heat at American Steel & Wire; Enhancing control of Shepcote caster. Mar 124

The missing link — Computerised production planning and scheduling. Mar 125

Personal computers for steel plant control by David James. Mar 126

Llanwern's stand alone PC control for secondary steelmaking. Mar 128

Computer assisted shimless slitting. Mar 128

Digital radio makes a sound link in Scunthorpe; Neural network computers learn on the job; Upgraded testing software. Mar 130

The role of CAD in roll design; Breaking out of recession — The IT Key. Mar 132

Factory wide SPC network at coil stockholder; UNIX unites users; Automatic spreadsheet input to Lotus. July 394

Increasing profit margins by computerisation; Database for stainless machining; Statistical quality control update. Jul 397

Intelligent computer protection; Auto fax order confirmation; Protecting the network; Just in tube IT delivery for Wheeler. July 398

D

Degassing

Vacuum degassing of liquid steel at British Steel Llanwern Works by C I Phillips *et al*. Apr 206

E

Electric steelmaking

IISI report on EAF operations reviewed by J Aylen. May 242

Direct current EAF — a review. May 245

Developing the largest DC arc furnace by Isamu Kawakami. May 246

A new generation of cleaner electric arc furnaces by V Garzitto *et al*. May 250

Transformer design for DC arcs by L Poggi. May 253

The price of power. May 256

Focus on power. May 259

The trouble with zinc. May 268

Engineering steels

Basque special steels — emerging from the doldrums. Dec 658

New die steels from NKK produced as plate. Dec 660

Vertical casting of engineering grade steels. Dec 661

Modern steels suffer Charpy sensitivity in HAZ. Dec 662

Forging through the recession. Dec 677

Environmental control

The trouble with zinc — Inst of Metals seminar. May 268

Treatment of EAF dust by the Tetronics plasma process by C D Chapman *et al*. June 301

Cleaner air inside Swedish EAFs by Björn Svensson. June 305

Slag resistance furnace for treatment of EAF dust. June 306

Dioxins in steelmaking dust; Settling a problem in filtration; Direct dealing; Better settling. June 310

Clean air fans; Applying waste processes; Obscuring fume meter reduces cost. Oct 569

European File by Peter Wood

Jan 7, Feb 60, Mar 116, Apr 175, May 238, June 294, July 354, Aug 418, Sept 480, Oct 548, Nov 598, Dec 652

F

Finishing

Levelling of flat products — Institute of Metals Seminar report. Apr 205

Straightening of long products Institute of Metals seminar report. Dec. 671

FRANCE — Country profile

Market trends in the French steel industry. Aug 423

Usinor Sacilor — the giant of Europe. Aug 424

Sollac — the keystone to flat products. Aug 426

GTS Industries — plate products. Aug 428

Europipe — welding a venture in tubes. Aug 430

Ugine — Stainless and special flats. Aug 431

Unimétal — On the fast track. Aug 432

Ascométal — Engineering a future in steel. Aug 434

H

Handling

Microwave crane control system. Oct 574

Faultless record for Champion crane; Handling Bison in the UK; Buying cheap but paying dear. Oct 576

Vertical plate storage halves the problem; Weightless lifting — Zero G balancing the difference; Made-to-measure conveyors; Unrestricted headroom. Oct 578

Radio crane control delivers the goods; Sprint doors control the environment. Oct 581

Stockholding under remote control; Streamlining stocktaking with on-board scales. Oct 582

Heat treatment

High performance recuperation from 700°C. June 325

Lift-off for large diameter coils; Briefcase analysis system for fuel saving. June 326

Do or die steels. June 329

New software promises savings in furnace costs; Ammonia nitriding IR control; Induction heating cuts scale loss. June 330

I

Information exchange

Sheerness training expertise is valued worldwide. May 260

World cost curve — a spreadsheet to production costs. May 262

Armchair experts; Stockholding IT. May 264

Searching the Abstracts; Searching Standards. May 266

Instrumentation

New meets old in steelmaking instrumentation — Institute of Metals Instrumentation seminar. Apr 202

Ironmaking

European Ironmaking Congress Preview. Sept 519

Song of the Clyde — a report on the 2nd European Ironmaking Congress. Nov 604

World record coal injection at Sollac Dunkirk. Nov 605

Granulated coal injection keeps on going. Nov 607

Cokeless Corex offers cleaner ironmaking. Nov 608

A new concept of BF control. Nov 611

Radar technology makes the blast furnace more transparent by Hans Jochen Grisse. Nov 612

Ladle metallurgy

Plasma torch cleans up the ladle furnace by H Bebber *et al*. Dec 665

Innovative ladle slide gates for small heats; 90t vacuum degasser operative at Buderus. Dec 668

M

Mechanical handling

Changing world of steelmaking calls for innovative handling strategies. Mar 134

Passing the parcel. Mar 136

Transfer cars link meltshop operation; Compacting and strapping improve coil presentation. Mar 138

Getting a grip on steelworks handling; Contactless handling and conveying for sensitive surfaces. Mar 140

Crane strategy improves stockholder production; Good vibrations; Common answer for steelworks transporter. Mar 142

Helping production go off the rails. Mar 144

Melting Pot by Keith Gale

Open hearth pig iron; Titanic. Jan 35

A steam computer? Too many specifications; Iron for life. Feb 101

Cannons or columns? — The hole truth; Pictures — good and bad; Greensand. Mar 154

Slipe Iron; Steel from chemical waste; Electricity in Steelworks. Apr 210

Computers and their ancestors in steel; Nettlefolds: screws & steel; Cannons update. May 274

Where was it? Will it work? June 332

The origin of high speed steel; SI and SI: 125 years; Preservation. July 388

Fail safe?: Anonymous notebooks. Aug 460

Dark satanic mills; Nicknames; Canada plate. Sept 528

Shift working hours; Continuous casting — a steelmaking revolution in one man's lifetime; Blue prints. Oct 572

History in a pub; Spare a thought for the unknown. Nov 634

Assembling the Iron Bridge; Gear cutting. Dec 684

Mini Mills

Mini Mills in the global steel market by Hans Mueller. Oct 552

Multi-strand control at Scunthorpe Rod Mill. Oct 556

Hi-Plas treating steelwork dust by R Lightfoot. Oct 559

Nucor's second thin slab CSP plant. Oct 560

Monitoring & Targeting

Specification and justification of computerised M&T by D I Jones. Dec 674

Monitoring software provides power over energy. Dec 674

Motors
Variable speed AC motor pays back in 16 months. Dec 677
Driving motors for mills — ABB Drives. Dec 678

O
Offshore demands
Accelerated cooling of plate by water-air spraying. Nov 617
Development of offshore steels by P H Bateson *et al*. Nov 620
Manufacture of high integrity steel castings for offshore structures by Roger Richardson. Nov 622

Oxygen steelmaking
BOF replacement vessel at Iscor by D Bell *et al*. July 358
Developments in BOS process control at British Steel by G K Notman. July 360
Converter design to maximise life. July 362
Oxygen activity measurement using the Celox probe by S Pagden *et al*. July 366

P
Preventive maintenance
Reliability, maintainability and availability in implementing a new project. Apr 193
Oil-air bearing lubrication at Sheerness Steel by A B Phillips. Apr 194
Bearing monitoring helps plant run more smoothly. Apr 196
To plan or not to plan — a software option. Apr 198
Monitoring cumulative fatigue in mill drives; Infrared warning; Monitoring system to keep the motors running. Apr 199
Machine size need not limit lubrication; Fluid analysis reveals condition; Laser system monitors machine vibration. Apr 201

Q
Quality control
Computer SPC route to total quality at BS Port Talbot by Dr B J Hewitt. Jan 14
ISO 9000 and Imatra's quality system by Heikki Hurmola. Jan 17
Laser measurement in the steel industry. Jan 18
Islands of quality — IISI report. Jan 20
Total quality management and the computer. Jan 22
A picture of quality. Jan 22
Quality assurance in scrap. Jan 25

R
Raw materials
Management strategy to assure long-term coke supplies to steel mills by Dr-Ing G Nashan. Feb 86
National Steel Rebuilds No 5 battery with clean coke oven technology by Hermann Toll *et al*. Feb 88
High purity atmosphere gases for iron and steel production by Colin Moore *et al*. Feb 91
Water in the iron and steel industry. Feb 93

Refractory quality
Total quality in refractory manufacture; Sensible heating. Feb 96
Restoration of insulation modules in a forging furnace by Fred Lynch *et al*; Curing a ladle cleaning headache. Feb 98

Remelting
Vacuum metallurgy: Potential, applications and state-of-the-art systems by A Choudhury *et al*. Jan 26
ESR remelting at Thyssen Edelstahlwerke by C Heischied. Jan 28
New vacuum furnace enhances clean steel technology at SMP by G Oakes. Jan 30
Electroslag remelting — A summary of the state of the process by W Holzgruber. Jan 32

Rolling
Updating the Thrybergh Bar Mill by Derry Graham. June 313
Hot mill simulation software. June 321
Driving mills with alternating current; Zone spraying rolls. June 322

S
Scandinavian steel
From ferro to furnace by N Morrison *et al*. Apr 179
SSAB — Sweden's strip and plate mill. Apr 180
Firm roots in the Scandinavian metals industry by Bo Pettersson. Apr 184
Surveying for steel by Harri Siikasmaa *et al*. Apr 188
Icelandic Steel. Apr 191

Stockholding
NASS foresees no early recovery for stockholders. July 370
The way ahead for steel producers and stockholders. July 373
Howard Perry — the European connection. July 375
Floating steel stockholder. July 378
Introducing ISO 9000 in stockholder companies by Rita G Herlung. July 381

Stockholding Guide — 1991 Directory
(Supplement to May issue)

Service Centre
Marking; Visions of marking and tracking systems; The write way to mark. Jan 39
Stockholding; Independent stockholding venture; BS Stockholding cut prices. Mar 159
Water jet technology — cutting without heat. Apr 219
Air plasma combines speed with quality; Automating cut-to-length at John Tainton; Computerised control in rotary shear; Laser sheet profiling. Apr 220

Straightening
Getting straightness right — a report on the Institute of Metals seminar Straightening of Long Products. Dec 671

Surface inspection
Automatic surface inspection at British Steel Llanwern by G H Jones *et al*. Mar 146

T
Temperature control
Temperature uniformity and its effects on quality control by Harry Dann. Nov 624
Controlling coke ovens; Biting into temperature measurements; Optical solution; Non-contact temperature control. Nov 625
Auto control; Measuring up to molten metal; Temperature Transmitter reduces cost; Monitor Information overnight; Infrared twin control; Adding computer control. Nov 626

U
UK Independent Steelmakers
President's speech — BISPA AGM — Third successive year of achievement for steel. Feb 64
BISPA in 1990 — Europe and GATT. Feb. 65
Company investments. Feb 66
United Engineering Steels — Brymbo goes but investment grows. Feb 70
Arthur Lee and Sons plc — Investment brings success for Lee companies. Feb 72
Glynwed Steels takes in Tubes and a new CEO. Feb 72
Sheffield Forgemasters — looking to the near east. Feb 74
Unsco or Unbrako? — the customer knows best; Barworth Flockton — well placed for success. Feb 76
Carrs Special Steels — custom steelmaker; Doncasters Sheffield Ltd — furnace investment. Feb 78
Firsteel Group — investing for Europe; Peter Stubs — Traditional quality in a changing market. Feb 80
More reorganisation at TWIL; United Merchant Bar — expanding into the '90s; Martins Merchant Mill — Scotland's own. Feb 84
United Merchant Bar — the Phoenix emerges. Nov 630
Lee Bright Bars — Investing in a brighter future. Nov 629

W
Weighing
Computerised scrap weighing for BOF plant. Jul 383
The weigh to trade. Jul 383
On-line billet weigher removes shrinking profit; Mid range belt weigher; Weighing the PC way; Crane scales. Jul 384
Roller conveyor weighbridge; New life in weighbridges. Jul 386

Z
Zinc reverts
The trouble with zinc. May 268

Supplement

Stockholding Guide May
1991 Directory of
ferrous and non-ferrous
UK stockholders.

List of Authors to Editorial Index — Volume 219

Aylen Jonathan May 242
Bateson P H *et al* Nov 620
Bebber H *et al* Dec 665
Bell D *et al* July 358
Brauner Jochen *et al* Oct 568
Chapman C D *et al* May 301
Choudhury A *et al* Jan 26
Dann Harry Nov 624
Gale Keith Jan 35, Feb 101, Mar 154, Apr 210, May 274, June 332, July 388, Aug 460, Sept 528, Oct 572, Nov 634, Dec 684
Garzitto V *et al* May 250
Graham Derry June 313
Grisse Hans Jochen Nov 612
Heischied C Jan 28
Herlung Rita G July 381
Hewitt Dr B J Jan 14
Holzgruber W Jan 32
Hurmola H Jan 17
Imlau K P *et al* Sept 484
James David Mar 126
Jones D I Dec 674
Jones G H *et al* Mar 146
Kawakami Isamu May 246
Kohl Sepp *et al* Mar 120
Lightfoot R Oct 559
Lynch Fred *et al* Feb 98
Moore Colin *et al* Feb 91
Morrison N *et al* Apr 179
Mueller Hans Oct 552
Nashan Dr-Ing G Feb 86
Nomi Ryoichi *et al* Sept 490
Notman G K Jul 360
Oakes G Jan 30
Pagden S *et al* Jul 366
Pettersson Bo Apr 184
Phillips A B Apr 194
Phillips C I *et al* Apr 206
Poggi L May 253
Raymond Ian M Mar 122
Richardson Roger Nov 622
Scholes P H Jan 45
Siikasmaa Harri *et al* Apr 188
Svensson Björn May 305
Terrell Edward M *et al* Oct 564
Toll Hermann *et al* Feb 88
Wood Peter Jan 7, Feb 60, Mar 116, Apr 175, May 238, June 294, July 354, Aug 418. Sept 480, Oct 548, Nov 598, Dec 652